

METHODS AND SYSTEMS FOR ESTIMATING FORMATION RESISTIVITY THAT ARE LESS SENSITIVE TO SKIN EFFECTS, SHOULDER-BED EFFECTS AND FORMATION DIPS

Abstract

A method for determining an electrical property of a formation includes acquiring a first resistivity measurement by energizing a first transmitter and receiving a first signal in a first receiver, wherein the first transmitter and the first receiver are disposed on the logging tool in a first orientation substantially parallel to a longitudinal axis of the logging tool; acquiring a second resistivity measurement by energizing a second transmitter and receiving a second signal in a second receiver, wherein the second transmitter and the second receiver are disposed on the logging tool in a second orientation that is substantially orthogonal to the first orientation; and deriving the electrical property of the formation from a difference measurement that is derived from the first resistivity measurement and the second resistivity measurement.

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